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# OPNET

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# Overview

- Original work at MIT, now maintained and marketed by OPNET Inc.
- Discrete event simulator
- OPNET Modeler
  - Hierarchical modeling that mimics real life architecture: Network, Node, and Process Layer modeling
  - At Process Layer, a finite state machine representation is used for modeling, where state behavior is dictated by C code
  - Canned process models are supplied (open code) for many popular communication protocols
  - Decent capabilities for animation, GUI, analysis, debugging, etc.
- **OPNET IT Guru: Deals with only Network Layer; other layers are pre-canned and invisible**

# Setup

- Follow instructions supplied on an insert in the textbook to
  - Obtain the Experiments Manual from <http://booksite.mkp.com/Aboelela/>
  - Obtain OPNET IT Guru Academic Edition software from [http://www.opnet.com/itguru-academic/mk-setup\\_portal.html](http://www.opnet.com/itguru-academic/mk-setup_portal.html) (if installing on your own PC)
- OPNET IT Guru Academic Edition is installed on the EECS instructional Windows machines
  - Can be accessed using your EECS Windows account
  - Can also be accessed by remote terminal service
    - Remote Desktop Connection in Windows XP
    - Will need to know the IP address of the host to access from an off-campus location
  - Class accounts are available from the instructors or see <http://inst.eecs.berkeley.edu/>

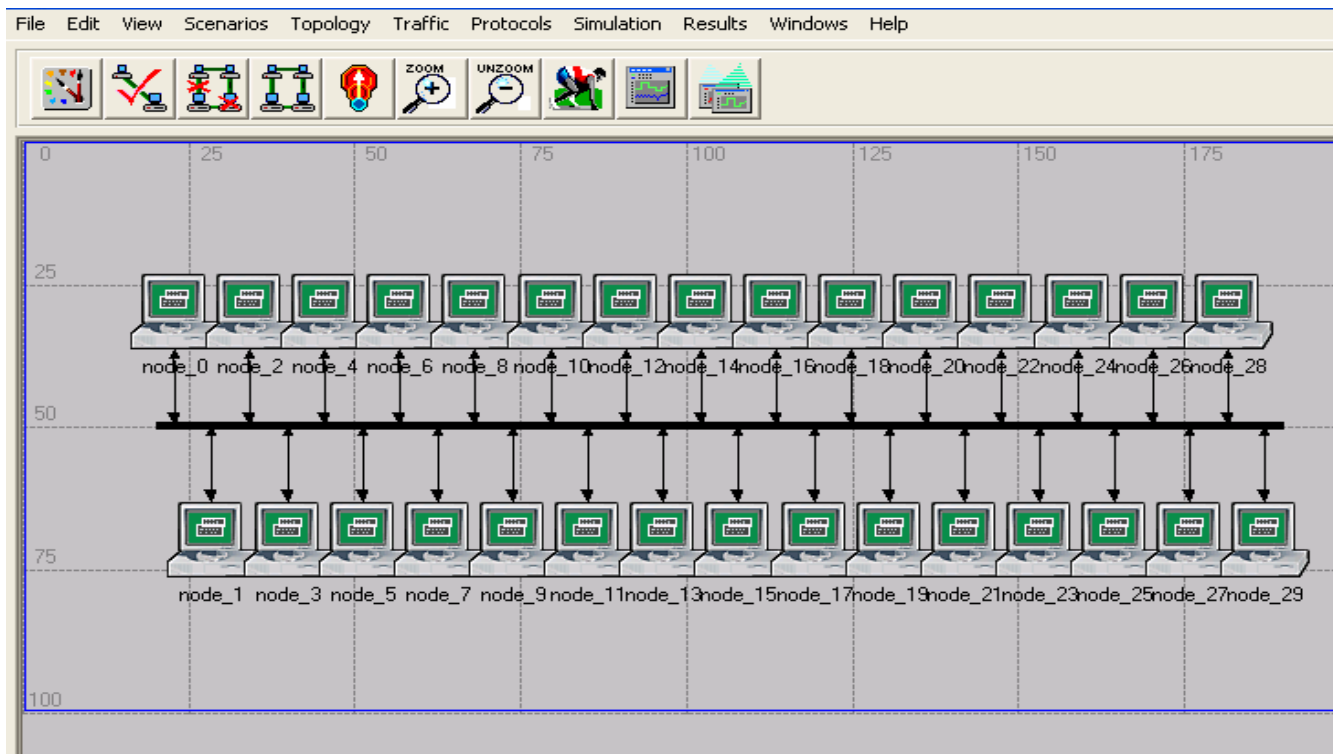
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# Introduction and Tutorials

- Required manual sections will be posted on the class website's syllabus link (available when an assignment is out)
- Go through the "Introduction" of the Experiments Manual to develop a good familiarity with the simulation tool
  - Should not have to change the OPNET preferences
  - Only answer the lab questions indicated for each assignment
- "Introduction" leads you to the following tutorials packaged with the software
  - Introduction
  - Small Internetworks

# Demonstration (Ethernet Lab)

- Let's walk through the Ethernet lab (Lab 1 of the Manual):



- First OPNET assignment is the Ethernet lab (Lab 1 of the Manual) – Due back on Thursday, February 24